

CLAIMS

1. A ceramic substrate having: a heating element composed of one or more circuit(s) on a surface thereof or inside thereof;
5 and a through hole being made in the ceramic substrate,
wherein said heating element circuit is formed in the range of 20 mm or less from the inner wall of said through hole.
2. The ceramic substrate according to claim 1,
10 wherein said heating element circuit is formed in the range of 0.1 to 20 mm from the inner wall of said through hole.
3. The ceramic substrate according to claim 1 or 2,
wherein the thickness of said ceramic substrate is over
15 1.5 mm.